

AN INDEX OF MEDICARE PREVAILING CHARGES

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1.0 INTRODUCTION AND OVERVIEW

In Medicare's "customary, prevailing, and reasonable" method of reimbursing physicians, payment may not exceed the prevailing charge for a procedure. Prevailing charges (often calculated by specialty) are determined separately in each of approximately 240 charge localities as the 75th percentile of charges in that area, with the rate of growth since 1973 limited to the increase in the Medicare Economic Index. Previous studies have found substantial variation in prevailing charges across localities, with three- and four-fold differences in charges for particular procedures common (OTA, 1986; Burney, et al., 1978). Comparison with proxies for practice costs indicates that not all of the variation can be explained by cost differences (Burney et al., 1978).

Extensive geographic variation in prevailing charges not related to practice cost differences raises important concerns. In low charge areas, beneficiary access to care may be comprised or their financial burden excessive. The current pattern of geographic variation may be inequitable to physicians and result in their oversupply in high charge areas and undersupply in low charge areas.

Prevailing charge variation could be studied procedure by procedure. However, it is useful to have a summary measure of the average level of prevailing charges in a locality relative to other localities or to the national average. This report describes the development of such a summary measure, an index of prevailing charges. Comparison with a practice cost index will indicate how much of the variation in prevailings is explained by cost differences and which localities have prevailings which, on average, are high or low compared to costs. The index can also be used for simulating the impact of the application of a practice cost index to payments.

The report is organized as follows. Section 2 briefly discusses data requirements for a Laspeyres price index, and some issues in the selection of a "market basket" of procedures. Section 3 reviews the strengths and weaknesses of potential data sources for construction of the index. Section 4 analyzes the relationship among geographic variation in prevailings of different procedures and draws the implications for index construction. Section 5 describes the construction of a prevailing index from the 1987 BERC survey of prevailing charges. Alternative sets of expenditure proportions to weight the prevailings are developed and explained. Section 6 discusses the

prevailing index values. The effects of alternative weights on the values, and the correlation of medical, surgical, radiology, and consultation subindices with each other and the overall index are described. Appendix tables list the index values by locality.

2.0 THE LASPEYRES PRICE INDEX

Three data elements are needed to construct a Laspeyres index of prevailings with the national average as the base "area" of comparison:

- National expenditure shares by procedure;
- National average prevailings;
- Prevailings for particular localities.

The ratio of the latter two elements, locality prevailings divided by the national averages, defines locality prices relative to the national average by procedure. Each locality's price relatives are then weighted by the expenditure shares and summed to determine how "high-priced" a locality is, on average, relative to the national average. Procedures which account for a larger share of national Medicare expenditures are weighted more heavily in determining the index. Mathematically,

$$I_j = \sum_i (ES_i) * (P_{ij} / P_i) \quad (1)$$

where

I_j is the prevailing index for the j^{th} locality;
 ES_i is the national expenditure share for the i^{th} procedure;
 P_{ij} is the prevailing for the i^{th} procedure in the j^{th} locality; and
 P_i is the national average prevailing for the i^{th} procedure.

Ideally, the prevailing index would be calculated with data for all Medicare procedures. However, an exhaustive index may be precluded by data limitations or may be unmanageable since there are thousands of different procedure codes. An alternative is to calculate an index for a much smaller "market basket" of procedures. The smaller group of procedures should be representative of different types of procedures, performed by different specialties. Moreover, they should be widely-performed so that they are priced in many localities.

If geographic variation in prevailings is highly correlated among certain groups of procedures, one procedure from the group can be used to proxy for the geographic variation of the entire group. In this case, the included procedure should be weighted by the expenditure share for the entire group. Conversely, if geographic variation in prevailings is not highly

correlated, grouping is less important and any reasonably large sample of procedures will tend to yield a similar index. To the extent variation in prevailings is not highly correlated, an aggregate index will be an imperfect indicator of variation in the prevailings of individual procedures.

3.0 DATA

Three data bases from 3 different years are available to create the prevailing charge index described above. Each of the three potential data bases has advantages and disadvantages. The ideal data base would provide accurate prevailing and frequency data at the locality level for a group (or market basket) of well-defined procedures that would be representative of the universe of Medicare procedures. Ideally, expenditure shares would be available for all market basket procedures so that they could be weighted in terms of their relative importance to all Medicare Part B expenditures.

Unfortunately, existing data bases do not meet all of the criteria for an ideal data base. Prevailing and frequency data are often missing or inaccurate for many localities. Procedures may not be standardized across localities. Because carriers use different procedure codes and bundle services differently for payment purposes, prevailing and frequency data provided for a procedure may not be describing the same product across localities. Consequently, variation in prevailings across localities may stem from definitional rather than geographic variation. Finally, the number and type of procedures for which prevailing and frequency data are available is not always large or varied enough to develop a market basket that is representative of the universe of Medicare covered procedures.

In this chapter, we first describe each of the three potential data bases and review their relative strengths and weaknesses. Then, based on these comparative strengths and weaknesses, our choice of a data base for a prevailing index is described.

3.1 The 1984 Prevailing Charge Directory

Between 1975 and 1984 HCFA published data from each Part B carrier on the prevailing charge and service volume for each of approximately 100 physician services. The most recent 1984 data were actually submitted by the carriers in 1982. The data were obtained for each procedure at the locality level for the specialty that performed the service most often.

Of the 100 services, 25 were performed most frequently by general practitioners. For these procedures, data were also collected for the specialist that provided the service most often (usually internists, but

sometimes family practitioners or radiologists). Thus, reported prevailings refer to different specialties, depending on the procedure. Furthermore, prevailings for a single procedure can pertain to different specialties if different specialties perform the service more often in different localities.

The advantages of this data base are two-fold. First, the data are fairly well-documented and relatively manageable because of the file's small size. Second, data for a fairly wide range of services are provided, enhancing the representativeness of the market basket.

The disadvantages are numerous however. Foremost among them is a high degree of missing data, resulting from the age of the data. Although published in 1984, the data refers to fee screen year 1982. Not only is this less recent, it predates widespread use of HCPC procedure codes by carriers. In order to obtain prevailings from all localities for a given procedure, crosswalks from carrier-specific codes to HCPC codes had to be developed. Sometimes codes could not be matched and consequently there are missing data for both prevailing charges and frequencies. In addition, carriers did not always maintain information on the number of services provided by a particular specialty at the locality level, making information on service volume especially unreliable. Without frequency data for many procedures, calculating weighted national prevailings essential for computing an index is difficult. Another drawback is the lack of detail at the specialty level. To the extent that carriers calculate specialty specific prevailings for certain market basket procedures, a prevailing index based on these data may reflect variation among specialties rather than geographic variation.

3.2 1985 BMAD Data

Since 1983, HCFA has been collecting detailed Part B Medicare data files (BMAD) from all of its carriers on an annual basis. These data include information on all procedures billed by physicians and reimbursed by Medicare. Of particular interest to this study are data on prevailings and frequencies at the locality level for all Medicare procedures. The most recent year for which BMAD data are available is 1985.

While four types of BMAD files are available, all of the data necessary for constructing a geographic prevailing charge index are included on two files: the prevailing and procedure files. Procedure-specific data on prevailings exist only on the prevailing tape and frequencies can be obtained from the procedure file. Both files provide information on locality, specialty, HCPC code modifiers and type of service. The procedure file also includes data on allowed charges that can be used to develop expenditure shares.

Of the three data bases, the BMAD is potentially the best because it provides data on the universe of Medicare prevailings and frequencies. Although such detail at the procedure level is not necessary to create the index (and is in fact undesirable because the resulting file would be too unwieldy), it does greatly facilitate the process of obtaining a representative market basket. Information on expenditure shares can be used to select representative procedures. Furthermore, prevailings for included procedures can be correlated with those of excluded ones to test for representativeness. Another advantage of the 1985 BMAD data is that it can be stratified by specialty, unlike the 1984 Prevailing Charge Directory. Also, it is recent enough that most carriers were able to report the frequency data for HCPC procedure codes instead of carrier-specific codes.

The main drawback of using the 1985 BMAD data is the necessity of merging the prevailing and procedure files in order to have prevailings and frequencies on the same file. Merging the two files results in the loss of all prevailing and frequency data in seven states and missing data on certain procedures in other localities because records cannot be matched. Records fail to match for a number of reasons:

- 1) The carrier calculates prevailing charges for anesthesia services, but not surgical;
- 2) The carrier does not calculate prevailing charges for all specialties or localities;
- 3) The carrier does not calculate prevailing charges for all possible types-of-service; and
- 4) Sufficient documentation for the prevailing files was not provided by all carriers.

Even when records can be matched, there are still data caveats. Several carriers price prevailing charges using more specific categories of specialties or different types of service methods than HCFA recognizes, but report frequencies for the procedure file based on HCFA specialty and type-of-service codes, so that in merging the data, frequencies for a particular procedure may be matched with the prevailing of a more specific procedure. Finally, sometimes HCPC codes cannot be found on a carrier's prevailing charge file at all, presumably because there was too little activity for a prevailing to be calculated, or the carrier used a fee schedule for the service.

3.3 1987 BERC Data

The Bureau of Eligibility, Reimbursement and Coverage (BERC) obtained information on 1987 prevailing charges and the frequencies used to establish those charges from 53 carriers serving all fifty states and Washington, DC. Data were obtained for 10 types of procedures shown to be among the most costly in terms of total Medicare reimbursements. The procedure types chosen were as follows: initial consultations; EKGs; chest x-rays; coronary artery bypass grafts (CABG); transurethral resection of prostate (TURP); femur fracture surgery; colonoscopies; upper GI endoscopies; hip replacements; and pacemaker implants. In addition, information on other visit and certain other surgical procedures was requested for comparison purposes. In total, data were requested for 67 CPT codes.

The BERC survey obtained charge and frequency data at the locality level. Within locality, data were provided for each specialty (or group of specialties) for which the carrier established a separate prevailing charge screen on the basis of actual charge data for that specialty or specialty group. Carriers indicated if no locality distinctions or if no specialty distinctions were made for payment purposes.

The 1987 BERC data are both the most recent of the three potential data sets and probably the most accurate. By surveying the carriers for prevailing and frequency data simultaneously, BERC managed to avoid many of the problems relating to the use of carrier-specific rather than HCPC codes and linking prevailing and procedure files. Consequently, data exist for many procedures in all localities, unlike in the two other data bases where the data in certain localities may be missing altogether. In addition, like the 1985 BMAD data, these data can be stratified by specialty.

The major limitation of the BERC data is the number and type of procedures for which data were collected. Prevailing charge and frequency data were collected for only 66 procedures compared to 100 procedures for the 1984 directory data and the universe of Medicare procedures on the BMAD files. More importantly, the types of procedures included do not represent as wide a range of services as those in the 1984 directory data and certainly are not as comprehensive as the BMAD data. For example, of the 66 procedures, nine were various types of coronary artery bypass grafts, 12 were different types of colonoscopies, 7 were various pacemaker implant procedures, and 6 were very similar sigmoidoscopies. While certain types of CABGs are performed relatively frequently and account for a high share of expenditures, others are quite obscure and comprise very little of total Medicare expenditures. Of the 66 procedures, only 10 truly different types of services are represented. This drawback could compromise the representativeness of the market basket, resulting in an index that describes variation in a select few services rather than a representative sample.

3.4 Conclusion

The 1987 BERC data is the best of the three data bases discussed above, for our purposes. It is the most recent, the most accurate, and the most geographically comprehensive. The unrepresentativeness of the data set can be addressed by weighting the BERC procedures by expenditure shares based on allowed charges from the BMAD procedure file. Since the creation of expenditure shares do not necessitate the use of any data on the prevailing file, the problems associated with merging to the files do not exist. Using BMAD allowed charges to generate expenditure shares is appropriate because they reflect exactly how much Medicare spent on each covered service.

BMAD data from the procedure file can also be used to show how correlated allowed charges are across procedures without encountering problems involved in linking the two files. Although using BMAD data for this purpose allows analysis of intercorrelation in both narrow and broad procedure groups it has a potentially serious drawback, namely that using allowed charges may not be equivalent to using prevailings. Consequently, we use the 1984 Directory data to analyze the relationship across procedures in geographic charges in this report. A later report will use allowed charges from the 1985 BMAD data for comparison.

4.0 THE RELATIONSHIP AMONG GEOGRAPHIC VARIATION IN PREVAILING CHARGES

Appropriate weighting of the limited, nonrandom sample of procedures in the 1987 BERC survey should result in a more representative index of prevailing charges. If geographic variation in the prevailings of procedures included in the BERC survey is highly correlated with variation in the prevailings of non-included procedures, the BERC procedures can be weighted to proxy for the variation in larger groups of procedures, overcoming the limitations of the BERC sample. The degree of correlation among the prevailing charges of different procedures will determine appropriate weights. The extent of correlation is of additional interest because it indicates how accurately an index proxies for variation in the prevailings of individual procedures, and ultimately has implications for how much of variation in prevailings may be explained by a cost index. This section studies the degree of correlation of geographic variation in prevailings of different procedures.

Two data sources are used to analyze correlations. The 1984 Medicare Directory of Prevailing Charges assembles prevailing charge information for a representative selection of procedures for a large number of localities.

However, because the Directory procedures were selected to represent a wide range of procedures, they are not useful to analyze correlations among the prevailings of closely-related procedures. For this purpose, we use the 1987 BERC survey. In the future, we plan to replicate and extend the analysis in this section using the 1985 BMAD data, which has advantages over the Directory data as discussed in Section 3. Thus, the analysis and conclusions of this section should be regarded as preliminary.

The 1984 Directory contains information on prevailing charges for 110 different payment codes. Elimination of laboratory and durable medical equipment codes reduces this number to 78. A list of these 78 procedures is given in Appendix Table A-2. For general practitioners, prevailings were collected for only about 30 of these codes; consequently, we limited the analysis to "specialist" prevailings. The specialist for which a prevailing was collected varies by procedure, ranging from internist for many of the visit codes, to psychiatrist for psychotherapy, surgeons for the surgery codes, and radiologists for the radiology codes. For most of the 78 medical/surgical codes, specialist prevailings were collected for 150 or more localities.

Bivariate correlations cannot be used to analyze the relationship among the prevailings of large numbers of procedures because the number of correlations which must be examined is unmanageably large. Instead, the statistical procedure known as "factor analysis" is used. Factor analysis attempts to explain the intercorrelations among a set of variables by a small number of unobserved underlying "factors". If the prevailing charges of all procedures were perfectly correlated, then one underlying factor would explain all the variance in the set of prevailing charges. In this case, there is only one "dimension" to geographic variation in prevailings, which is captured by the single factor. If there were two groups of procedures whose prevailings were perfectly correlated within group, but uncorrelated between groups, then there would be two underlying factors, one for each group. In actual data sets, usually a number of factors similar or equal to the number of variables is necessary to account for all the variance of the data. However, the proportion of the variance accounted for by the first factor, or first few factors, indicates how highly intercorrelated the set of variables is. Moreover, factor analysis determines the degree of correlation of each variable (in this case, procedure) with each factor, so the factors can be interpreted by the procedures with which they are highly correlated.

We performed an unweighted principal components factor analysis on prevailings of the 78 procedures from the 1984 Directory. The results are summarized in Table 1. The interpretations of the factors are based on the correlations (factor loadings) of the procedures with the factors. The factor loadings for the first 10 factors are lengthy and so are listed in Appendix

TABLE 1

FACTOR ANALYSIS OF 1984 MEDICARE DIRECTORY SPECIALIST PREVAILING CHARGES

<u>Factor</u>	<u>Proportion Variance</u>	<u>Cumulative Proportion</u>	<u>Interpretation*</u>
1	36.4%	36.4%	General medical/surgical factor
2	9.7	46.1	Emergency room visits/radiation therapy
3	5.7	51.8	X-rays
4	5.1	56.9	Consultations
5	4.3	61.2	Certain diagnostic tests**
6	3.4	64.5	Follow-up hospital visits
7	2.7	67.2	Psychotherapy
8	2.5	69.7	CABG/Insertion of pacemaker/ Prostatectomy -- suprapubic
9	2.3	72.0	Chemotherapy
10	2.1	74.1	CAT-scans

*Interpretations are based on a varimax rotation. Procedure correlations with the 10 rotated factors are given in Appendix Table A-L.

**Arthrocentesis - major joint/needle puncture of bursa/thoracentesis/diagnostic cystourethroscopy.

Source: Medicare Directory of Prevailing Charges, 1984.

Table A-1. The first factor accounts for 36 percent of the variance in the prevailing charges, indicating only a moderate degree of intercorrelation. The majority of visits and procedures are moderately or highly correlated with the first factor (45 of the 78 procedures have loadings of .4 or higher--see Table A-1), so the first factor may be interpreted as a general medical/surgical factor. The second factor accounts for only 10 percent more of the variance; it is clearly interpretable as an emergency room visit/radiation therapy factor by the much higher loadings of these procedures than any others on this factor. After the second factor, the incremental variance accounted for by successive factors falls to 6 percent or less. As a group, the first ten factors account for about three-quarters of the variance in the prevailings. Most of the factors are easily interpretable in terms of a small group of procedures (which are often not highly correlated with the general factor), as shown in Table 1.

The major conclusions from the factor analysis of the Directory procedures are that:

- As a whole, the Directory prevailings are only moderately intercorrelated.
- For the most part, the Directory prevailings do not separate into well-defined, highly-correlated groups. Instead, most medical/surgical prevailings are moderately intercorrelated with each other, while some other, smaller groups of prevailings are more highly intercorrelated, but less correlated with the larger group.

These two findings have the following implications. First, an index of prevailings will be only an approximate indicator of the geographic variation in most individual procedures' prevailings, and will be misleading for some procedures. Second, any single index of practice costs will at most explain a moderate amount of the variance in the prevailings of individual procedures as a group since their variation is only moderately correlated (although a practice cost index might explain most of the variance in an index of prevailing charges). Third, weighting the sample of BERC procedures by the allowed charges for broad groups will not improve the index significantly since procedures do not separate into highly intercorrelated large groups. Indeed, the particular weighting scheme chosen for the BERC procedures probably will not have a substantial influence on the index values. Any reasonably large and representative group of procedures should yield a similar prevailing index. The uncorrelated components of the prevailings will tend to cancel out when an average (i.e., an index value) is calculated for any locality, so the index will converge to the correlated component of the prevailings.

The Directory prevailings allow analysis of correlations among a broadly representative sample of procedures. However, because of the broad coverage, correlations among the prevailings of more closely related, narrower groups of procedures cannot be analyzed. For this purpose, we used the 1987 BERC Survey data.

Table 2 presents correlation coefficients among the prevailings of six of the CABG codes sampled in the BERC survey (three CABG codes were excluded because prevailings were available for very few localities). Geographic variation in CABG prevailings is highly correlated--all of the pairwise correlations exceed .7 and most are above .8. Conversely, the intra-group correlations of certain other categories--the pacemaker implant codes, the sigmoidoscopy and colonoscopy codes--are not higher or only slightly higher, than extra-group correlations. Hence, the findings of this preliminary analysis are inconclusive. The prevailings of some closely-related groups of procedures are high, but this is not true for all groups of procedures.

Considering the analysis of both the Directory and the BERC survey data, the following implications for the construction of an index from the BERC data emerge. Using the prevailings of BERC procedures to proxy for the prevailings of clinically-related, narrowly-defined groups of procedures may improve the accuracy of the index somewhat. There will not be much gain in accuracy from using the BERC prevailings to proxy for less-closely-related, larger groups of procedures. Any reasonable weighting scheme should result in a similar index. Moreover, ~~the limited~~ and nonrandom sample of procedures in the BERC survey probably will not bias a prevailing index created from it to any appreciable extent.

5.0 CONSTRUCTION OF A PREVAILING CHARGE INDEX FROM THE 1987 BERC SURVEY DATA

This section describes the construction of a prevailing charges index from the 1987 BERC Survey data. The discussion in Section 2 indicated that three data elements are necessary to construct a Laspeyres index:

- (1) National expenditure shares by procedure;
- (2) National average prevailing charges by procedure; and
- (3) Prevailing charges by procedure for particular localities.

Section 5.1 describes the national expenditure weights used to aggregate the ratio of locality prevailing charges to the national average. Three different sets of weights were developed. They vary depending on how the limited set of BERC procedures are used to proxy for non-included procedures.

TABLE 2

GEOGRAPHIC CORRELATIONS AMONG CABG PREVAILING CHARGES

<u>HCPC Code</u>	<u>HCPC CODE</u>				
	<u>33511</u>	<u>33512</u>	<u>33513</u>	<u>33514</u>	<u>33516</u>
33510	.86	.83	.82	.71	.77
33511		.82	.85	.77	.79
33512			.92	.84	.84
33513				.91	.85
33514					.86

Source: 1987 BERC Survey of Prevailing Charges.

Section 5.2 describes the calculation of national average and locality prevailing charges. In addition, the editing of the localities reported by the carriers, some of which are not geographically based, and the development of a final locality list for which the index was computed, are discussed.

Section 5.3 details how the expenditure weights and price relatives described in Sections 5.1 and 5.2, respectively, are combined to yield the actual index values.

5.1 Developing National Expenditure Shares

The procedures BERC sampled in its 1987 survey are not a representative cross-section of all procedures. The survey included only 66 procedures accounting for 27.6% of total allowed charges. Appropriately weighting the BERC prevailings should improve the representativeness of the prevailing charge index.

The premise we used in weighting the BERC prevailings was that the prevailings of clinically-related procedures are more highly correlated than the prevailings of randomly-selected procedures. As was shown in Section 4, this is true only to a limited extent. Nevertheless, to the extent it is true, and the correlations among prevailings do seem to be higher as the procedures are more similar, weighting the BERC prevailings by the expenditure share of a related group of procedures should increase the accuracy of the prevailing index.

Three sets of expenditure weights were developed. In each alternative, BERC procedures were assigned to one of four major groups: surgical, medical, radiology, and consultations. Subindices were constructed for each of the four types of service which were then combined into the overall index using aggregate expenditure weights for each type of service. Four of eight major types of service are represented in the BERC data. It does not include any procedures in the other groups: pathology, anesthesiology, other, or unknown. Therefore, our index includes the four types of service only, which account for 70.6 percent of total allowed charges. Total allowed charge weights for each group have been calculated by Terrence Kay of HCFA-ORD from 1985 BMAD data using carrier-reported type of service.* The share of allowed charges for each type of service as a proportion of the four-group total are: surgical 40.66%, medical 41.13%, radiology 12.57%, and consultations 5.64%.

We developed three methods of weighting procedures within the four type of service groups. Each uses individual procedure expenditure shares which

*We adjusted the shares of allowed charges received from Terrence Kay of HCFA-ORD to equal shares of allowed charges for medical, surgical, consultations, and radiology procedures only.

*Comment re:
Sensitivity of
results w/
using
T.O.S.*

were computed as the procedure's share of 1985 total allowed charges. They differ in how the BERC survey prevailings are weighted to represent the prevailings of unsurveyed procedures.

Method 1 is the simplest. Within each group, the BERC procedures' individual expenditure shares were proportionally inflated so that the sum equalled the aggregate expenditure share of that type of service (e.g., 40.7 percent for the surgical group). Method 1 assumes that prevailings of procedures excluded from the BERC data are more highly correlated with BERC procedures' prevailings in the same types of service than with other types of service. However, no grouping within the four aggregate types of service is used.

Method 2 uses subgroups of procedures within the aggregate type of service classifications. Nonsurveyed procedures were grouped with clinically related BERC procedures within the four type of service groups to form sub-groups and the BERC procedures in each sub-group were weighted to represent the entire sub-group's expenditure share. The sub-groups are:

Surgical
orthopedic surgery
endoscopies
CABGS
pacemakers
procedures performed by general surgeons
procedures performed by urologists
Medical
office visits
hospital visits
electrocardiography

For example, the variation in all office visit prevailings is represented by the 7 BERC office visits. For the radiology and consultation groups, no sub-groups were used; the two chest x-rays were used to represent all radiology and the five consultations were used to represent all consultations (as in Method 1). Appendix A, Table 3 lists the procedures in each sub-group. The BERC procedures in each sub-group were proportionally weighted based on individual procedure expenditure shares to represent the expenditure share of the entire sub-group, then the weights were proportionally inflated to the type of service's aggregate expenditure share (as in Method 1).

Method 3 uses the same sub-groups used in Method 2. However, unlike Method 1 or Method 2, the expenditures shares of unsurveyed procedures are allocated equally to the BERC procedures within each of the subgroups and aggregate type of service groups. This method results in more equal weights for the BERC procedures than in the first two methods. The rationale for more equal weighting is that when proportional weighting is used, as in Methods 1

and 2, BERC procedures with large individual expenditure shares receive proportionally large weights. However, within a clinical grouping, the prevailings of unsurveyed procedures are equally likely to be correlated with the prevailings of any of the BERC procedures in that group. Thus, allocating the expenditure shares of unsurveyed procedures equally, rather than in proportion to the BERC procedures' individual expenditure shares, may make more sense.

Table 3 shows the overall index weights for each of the BERC procedures derived from the 3 methods. There is not much difference between the weights using Methods 1 and 2. The differences are due to the within type of service sub-groups. In Method 3 procedures are weighted more evenly than in Method 2. The procedures in the General Surgeon Procedures sub-group illustrate the difference between Methods 2 and 3. In Method 2, the first gallbladder surgery is weighted much more heavily than the other 2 because its individual expenditure share is much higher. In Method 3, the first gallbladder surgery is weighted only slightly more heavily than the other two procedures because the expenditure shares of unsurveyed procedures are divided equally among the procedures. The weights for the limited office visit code illustrate the differences between the three methods. The weight for this procedure using Method 1 is 13.6, which is the procedure's actual expenditure share, inflated to its proportion of the medical type of service weight (41.1%). The weight for the limited office visit using Method 2 is 10.4 because a smaller expenditure share is allocated to office visits as a group in Method 2 than in Method 1. The weight for this procedure is only 5.6 using Method 3 because the expenditure share of unsurveyed office visits is distributed among the seven BERC office visits equally instead of being allocated mostly to the procedures with the largest expenditure shares, as is done in Method 2.

5.2 Calculation of Price Relatives

Prevailing charges should be reported in a large number of localities for the procedures used to create an index of prevailings. Column 1 of Table 4 shows that for 13 of the 66 BERC procedures, fewer than 100 localities report prevailings. These procedures tend to be the more rarely performed, highly complex procedures (e.g., CABGs with 6 or more autogenous grafts or two or more nonautogenous grafts). Because these procedures were performed so infrequently, we did not include these 13 procedures in creating the index.

For each included procedure, the locality prevailing was calculated as a weighted average of specialty prevailings within locality. Consequently, prevailings are sensitive to locality specialty mix. Future work will explore the effects of specialty mix on variations in prevailing charges. }

TABLE 3

EXPENDITURE WEIGHTS FOR 1987 BERC SURVEY PREVAILING CHARGES, BY PROCEDURE

	HCPCS Code	Weights Method 1	Weights Method 2	Weights Method 3
SURGERY, Total		40.66%	40.66%	40.66%
Orthopedic Surgery				
Carpal Tunnel	64721	.49	.58	1.46
Hip Replacements	27130	3.41	4.01	2.11
	27131	.70	.82	1.50
Femur Fractures	27236	2.08	2.45	1.81
	27244	2.64	3.11	1.94
Subtotal		9.32	10.96	8.82
Endoscopies				
Sigmoidoscopies	45330	.80	.61	.65
	45331	.13	.10	.50
	45333	.13	.10	.50
Colonoscopies	45360	1.07	.82	.71
	45365	.24	.18	.53
	45370	.28	.21	.54
	45378	2.07	1.58	.94
	45380	.92	.70	.68
	45385	1.73	1.32	.86
Upper GI Endoscopies	43235	2.62	2.00	1.06
	43239	1.78	1.36	.87
Subtotal		11.77	8.98	7.85
CARDS				
CABGS	33510	.42	.33	1.05
	33511	1.30	1.03	1.25
	33512	2.87	2.26	1.60
	33513	2.50	1.97	1.52
	33514	1.07	.84	1.20
Subtotal		8.17	6.43	6.61
Pacemakers				
Pacemakers	33200	.13	.22	.83
	33206	.59	.99	.93
	33207	.84	1.41	.99
	33208	.43	.72	.90
	33212	.17	.29	.84
	33216	.08	.13	.82
Subtotal		2.24	3.77	5.31
General Surgery Procedures				
Gallbladder Surgeries	47600	1.05	3.03	2.40
	47610	.75	2.17	2.33
Hysterectomy	58150	.75	2.17	2.33
Subtotal		2.55	7.37	7.07
Urologist Procedures				
TURPS	52601	6.22	2.97	2.57
Suprapubic Prostatec	55821	.25	.12	1.24
Petropubic Prostatec	55831	.13	.06	1.21
Subtotal		6.61	3.16	5.01
MEDICAL, Total		41.13	41.13	41.13
Office Visits				
New, brief	90000	.29	.22	1.46
New, limited	90010	.84	.64	1.63
New, intermediate	90015	1.27	.97	1.77
New, extended	90017	.39	.30	1.49
New, comprehensive	90020	2.45	1.87	1.14
Brief	90040	4.67	3.56	2.83
Limited	90050	13.64	10.38	5.64
Total		23.56	17.93	16.96
Hospital Visits				
New, brief	90200	.72	1.32	4.90
New, intermediate	90215	2.12	3.90	5.33
New, comprehensive	90220	6.97	12.85	6.85
Subtotal		9.80	18.07	17.07
EKGs				
Complete EKG	93000	5.04	3.33	3.13
EKG Tracing	93005	.17	.11	1.61
EKG Report	93010	2.57	1.69	2.36
Subtotal		7.77	5.13	7.10
RADIOLOGY, Total		12.57	12.57	12.57
Chest x-ray, one view	71010	4.26	4.26	5.93
Chest x-ray, two views	71020	8.31	8.31	6.64
CONSULTATIONS, Total		5.64	5.64	5.64
Limited	90600	.42	.42	0.70
Intermediate	90605	.36	.36	0.67
Extended	90610	.68	.68	0.86
Comprehensive	90620	3.22	3.22	2.38
Complex	90630	.97	.97	1.03

Source: 1985 BMAD allowed charges

Table 4
Descriptive data on 1987 BERC survey prevailing charges, by procedure

Type	1987 Prevailing Charge					
	Number of Localities	Frequency of Procs.	Mean	Median	Minimum	Maximum
Cabg						
Procedure						
33510	101	3088	3606.05	3358.00	1465.00	7500.00
33511	124	10957	4110.28	3880.50	420.00	8300.00
33512	126	24056	4501.67	4400.00	650.00	7500.00
33513	120	20708	4776.87	4632.70	2276.20	8500.00
33514	107	7317	4734.36	4644.00	2579.70	7500.00
33516	76	1836	4988.83	4884.80	3074.10	7500.00
33520	1	1	2910.20	2910.20	2910.20	2910.20
33525	1	5	2910.20	2910.20	2910.20	2910.20
33528	5	67	3990.23	3600.00	3081.75	4650.00
Cartun						
Procedure						
64721	202	33895	544.69	545.90	111.76	1109.00
Colon						
Procedure						
45360	221	193407	295.09	300.00	62.50	578.20
45365	199	24332	381.52	395.65	88.00	618.80
45367	23	126	572.04	556.70	217.40	840.00
45368	53	532	468.54	483.80	240.70	1200.00
45369	30	289	488.27	479.05	237.30	900.00
45370	166	16057	591.28	600.00	132.30	922.20
45378	202	219025	463.50	475.10	238.50	700.00
45379	32	699	634.64	650.00	216.25	1000.00
45380	193	82908	515.32	518.30	168.60	874.00
45382	70	1654	559.21	557.40	126.20	930.30
45383	57	547	607.13	600.00	215.70	850.00
45385	186	222619	737.82	700.00	306.40	1200.00
EKG						
Procedure						
93000	264	8695412	38.19	35.00	8.25	75.00
93000P	5	48390	19.59	20.00	11.00	44.30
93005	194	166164	29.06	25.00	9.00	75.00
93010	240	1.1E+07	15.10	15.00	4.10	38.80
93010P	12	702956	18.38	15.50	10.08	33.20
Femfr						
Procedure						
27236	205	62880	1288.98	1150.00	354.80	2883.40
27244	211	72897	1279.43	1143.90	754.10	2883.40
Glendo						
Procedure						
43235	210	370699	338.16	323.70	103.70	693.30
43239	186	186027	385.15	375.00	173.20	685.00
Gall						
Procedure						
47600	213	30832	924.90	886.90	450.50	1885.30
47610	191	16246	1111.29	1018.10	332.60	2218.00
Hip						
Procedure						
27130	197	44011	2736.72	2661.60	255.10	4436.00
27131	129	8807	2776.05	2849.35	1179.00	4800.00

Table 4 (continued)
Descriptive data on 1987 BERC survey prevailing charges, by procedure

	1987 Prevailing Charge					
	Number of Localities	Frequency of Procs.	Mean	Median	Minimum	Maximum
Hyster						
Procedure 58150	196	25156	1097.27	998.10	169.60	1996.20
Pace						
Procedure 33200	107	1962	1328.20	1261.60	350.00	2000.00
33201	31	2366	1099.52	1082.10	700.00	1885.30
33206	176	14663	1213.63	1150.00	221.80	2370.00
33207	187	26355	1216.16	1164.50	221.80	2044.20
33208	160	9894	1576.57	1584.00	500.00	2520.00
33212	164	7716	674.84	611.40	221.80	1500.00
33216	129	2871	607.28	590.90	277.10	1959.50
Sigmod						
Procedure 45330	239	400983	108.45	108.70	26.00	250.00
45331	198	34722	149.35	140.00	51.00	279.70
45332	44	2050	155.10	147.90	68.75	447.20
45333	150	5789	198.67	189.50	88.70	510.10
45334	57	379	356.94	266.10	102.70	1341.50
45336	34	351	370.49	383.50	88.70	688.20
Turps						
Procedure 52601	191	201702	1199.47	1108.90	639.20	2059.00
55821	142	4631	1326.71	1207.90	761.50	2300.00
55831	108	2389	1374.02	1330.50	676.30	2268.30
Visits						
Procedure 90000	253	763399	25.60	24.40	4.50	77.60
90010	262	1738968	31.25	31.10	6.00	82.00
90015	264	2099475	40.22	38.00	10.60	145.00
90017	219	582941	47.33	45.00	13.30	150.00
90020	243	2089311	69.03	66.60	10.00	175.00
90040	266	1.4E+07	18.22	17.50	4.50	135.00
90050	273	4.0E+07	21.09	21.00	6.60	86.70
90200	259	640574	54.89	55.30	12.40	116.45
90215	259	1924803	64.87	66.50	15.80	166.40
90220	269	5043994	85.33	84.50	22.20	210.00
90600	262	956052	62.23	55.50	10.00	132.20
90605	248	618088	63.80	64.30	11.10	130.00
90610	254	976133	78.08	77.60	22.00	157.25
90620	259	3958710	103.12	101.40	25.00	221.80
90630	211	837213	136.89	131.00	28.50	319.00
Xray						
Procedure 71010	266	1770962	26.78	26.60	8.70	60.00
71010P	104	5379513	13.90	13.70	2.70	25.00
71010T	13	71510	29.90	22.20	14.60	80.00
71020	271	4562270	38.22	39.90	9.50	71.00
71020P	103	5278811	17.19	17.00	2.30	38.60
71020T	16	49012	26.86	30.00	16.70	70.00

To create a national benchmark, we averaged the non-zero prevailings by procedure in all 319 reported localities, weighting by service volume in each locality. This yielded a national mean prevailing charge for each procedure as shown in Column 3, Table 4. As expected, national mean prevailings are highest for CABGs, followed by hip replacements and other surgeries, then by diagnostic procedures such as endoscopies and finally by visits and tests (e.g., EKGs and x-rays). Price relatives for each procedure in each locality were calculated as the ratio of the locality prevailing to the national average for that procedure.

Apparently, many services were not performed in all localities in 1987, and consequently prevailings in these localities did not contribute to the national average. In fact, Column 1 of Table 4 shows that of the 319 localities reported by the carriers, the largest number of localities reporting prevailings for a single procedure is 273. This is because many carriers also use locality codes to make non-geographical distinctions among prevailings. For example, Aetna carriers reserve locality codes from 50 to 59 to describe the prevailing for the professional component of the service. These prevailings can easily be folded back into codes 01 through 09 which represent actual geographic localities. Other carriers also have more codes than can be justified by the known number of geographic localities in their jurisdiction. Until it can be determined how the prevailings and frequencies in these residual "localities" can be folded into existing localities, we must exclude them from the geographic index. This may bias certain locality prevailings we calculate. Fortunately, exclusion of residual localities affects a small number of procedures and those only marginally (i.e. the frequencies in the residual categories were usually low if not zero).

Excluding non-geographic (or unidentifiable) locality codes and folding in others reduced the number of localities to 236. The final index was created for these 236 localities. However, all 319 localities were used to compute an unbiased national average.

5.3 Computation of Index Values

Three variations of an index of Medicare prevailing charges, corresponding to the three sets of weights reported in Table 3, were calculated from the 1987 BERC survey. Each index was computed according to the Laspeyres price index formula, equation (1) of Section 2. Price relatives by procedure for a locality, calculated as described in Section 5.2, were weighted by expenditure shares, described in Section 5.1, then summed. Since most localities were missing a prevailing for one or more procedures, the sum

of weighted price relatives were divided by the sum of the weights of reported prevailings. If this was not done, index values for localities with non-reported prevailings would be too low, and the more prevailings were absent, the more biased downwards the index values would be.

6.0 RESULTS

How sensitive is the index of prevailing charges to which of the three sets of expenditure weights reported in Table 3 is used? Given the similarity of the three sets of weights, and the correlational analysis described in Section 4, the index is not expected to be very sensitive to the choice of weights. Indeed, this is the case. The pairwise correlations among the three variations are .98 or higher. The differences among index values for particular localities are also quite small. The largest difference between the "Method 1" - weighted and "Method 2" - weighted indices is only .07 (1.0 is the national mean), and only 4 localities have differences of .05 or more. The largest difference between the "Method 2" - weighted and "Method 3" - weighted index values is .06 and only three localities have values which differ by .05 or more. Between the "Method 1" and "Method 3" indices, the largest difference is .10 and 13 localities have values that differ by .05 or more.

Given the close similarity of the three variations of the prevailing charge index, there is little point in presenting results for all three indices. Thus, we present only the simplest variation of the index, the "Method 1" - weighted index. It may be recalled from Section 5.1 that in this weighting scheme, the BERC procedures were grouped only into the four aggregate type of service categories of medical, surgical, radiology, and consults. Then the grouped individual procedure expenditure shares (of allowed charges) were simply proportionally inflated to sum to the aggregate share of each type of service in total allowed charges for medical, surgical, radiology and consultation services.

Appendix Table A-4 lists overall index and radiology, medical, surgical and consultation subindex values by state, carrier, and locality. In addition, as a measure of the amount of data on which each index value is based, the sum of the expenditure shares of reported prevailing charges for each locality is shown (the maximum is 1.0). Appendix Table A-5 presents the same data sorted by the value of the overall index from highest to lowest locality. Since, in each locality, each procedure's prevailing charge is standardized by the national average prevailing for that procedure, the base of the index, 1.0, is the national average.

The ranking of localities by how expensive their prevailings are (Table A-5) is generally as expected. Manhattan is the most expensive locality, exceeding the national average by 64 percent. It is followed by the eight Los Angeles localities, then several New York City areas and California localities, Alaska and Miami. Many other California localities are among the highest priced in the nation. In all, 31 localities have index values exceeding the national average by 20 percent or more. At the other extreme, many of the lowest-priced localities are small Texas cities, or rural states or portions of states. The lowest index value is .71 for Odessa, Texas, although this value is based on prevailings accounting for only half of the expenditure weights of the complete set of procedures. Most localities, however, have weights which sum to .8 or higher. Thirty localities have index values of .8 or less. The subindex values generally also appear reasonable, with the possible exception of the radiology subindex, which is somewhat erratic. This is probably because it is based on only the two chest x-rays. ✓

Table 5 presents correlations of the subindices with each other and with the overall index. the indices are highly intercorrelated, although the radiology subindex is less closely related to the other three. Again, this could be due to the fact that it is based on only two x-rays.

TABLE 5

CORRELATIONS OF PREVAILING CHARGE SUBINDICES WITH EACH OTHER AND OVERALL INDEX

	<u>Radiology</u>	<u>Surgery</u>	<u>Medical</u>	<u>Consulta</u>
Overall Index	.58	.85	.96	.86
Radiology		.47	.39	.40
Surgery			.76	.72
Medical				.84

Source: 1987 BERC Survey of Prevailing Charges.

APPENDIX A

TABLE A-2

PROCEDURE DESCRIPTIONS FOR TABLE A-1

Procedure	Procedure Description
1	Initial Brief Office Visit
2	Initial Limited Office Visit
3	Initial Intermed Office Visit
4	Initial Comp Office Visit
5	Minimal Followup Office Visit
6	Brief Followup Office Visit
7	Limited Followup Office Visit
8	Intermediate Followup Office Visit
9	Extended Followup Office Visit
10	Comp Followup Office Visit
11	Brief Followup Home Visit
12	Limited Followup Home Visit
13	Intermediate Followup Home Visit
14	Extended Care Facility Visit
15	Brief Followup Nursing Home Visit
16	Initial Brief Hospital Visit
17	Initial Intermediate Hospital Visit
18	Initial Comp Hospital Visit
19	Brief Followup Hospital Visit
20	Limited Followup Hospital Visit
21	Intermediate Followup Hospital Visit
22	Extended Followup Hospital Visit
23	Brief Emergency Room Visit
24	Limited Emergency Room Visit
25	Intermediate Emergency Room Visit
26	Limited Consultation
27	Extensive Consultation
28	Comprehensive Consultation
29	Psychotherapy-One Hour
30	Psychotherapy-Half Hour
31	Chiropractic Office Visit
32	Initial Physiotherapy
33	Followup Podiatric Office Visit
34	Electrocardiogram (EKG)
35	EKG-Interpret and Report Only
36	Spirometry
37	Electroencephalogram (EEG)
38	Chemotherapy
39	Collection of Specimens
40	Debridement of Nails
41	Skin Biopsy
42	Chemocautery
43	Radical Mastectomy
44	Open Reduction of Fracture
45	Arthrocentesis-Major Joint
46	Coronary Artery Bypass
47	Total Artificial Hip Replacement
48	Needle Puncture of Bursa
49	Bronchoscopy
50	Thoracentesis
51	Catherization of Heart
52	Insertion of Pacemaker
53	Partial Colectomy
54	Appendectomy
55	Sigmoidoscopy
56	Hemorrhoidectomy
57	Cholecystectomy
58	Repair Hernia
59	Diagnostic Cystourethroscopy
60	Dilation of Urethra
61	Prostatectomy - Suprapubic
62	Electroresection-Prostate (TUR)
63	Hysterectomy
64	Initial Complete Eye Exam
65	Comprehensive Eye Exam
66	Eye Exam With Tonometry
67	Extraction of Lens
68	Chest X-ray - Single View
69	Chest X-ray - Two Views
70	X-ray Spine
71	X-ray Hip
72	X-ray Upper GI Tract
73	X-ray Colon
74	Radiation Therapy - Low Volt
75	Radiation Therapy - Super Volt
76	Radiation Therapy - Megavolt
77	Cat Scan - Head
78	Cat Scan - Abdomen

TABLE A-3

PROCEDURES INCLUDED IN SURGERY SUB-GROUPS

Procedures	HCPCS
-----	-----
1. Orthopedic Surgery	
carpal tunnel	64721
hip replacements	27130 -31
femur fractures	27236,244
hip replacement	27135
osteotomy	27165
bone graft	27170
different types of fractures	many
arthrocentesis	20600,05,10
arthroplasties	24360 -63, 26530 -36, 23470,72, 27440 -27447,27486 21240 -21242 21445,6
2. Endoscopies	
laryngoscopies	31505 - 31575
bronchoscopies	31620 - 31659
esophagus endoscopies	43200 - 43227
upper GI endoscopies	43234 - 43239
operative upper GI endoscopies	43245 - 43258
endoscopies, bile duct/pancreas	43260 - 43268
small bowel endoscopies	44360 - 44361
colon endoscopies	44388 - 44392
sigmoidoscopies	45300 - 45333
colonoscopies	45335 - 45385
cytoscopies	52000 -275, 52281 -315, 52320 -338
shoulder arthroscopies	25820
knee arthroscopies	29870 - 29887
arthroscopy of joint	29909
3. CANGS	
CANGS	33510-33528
repair & revision of valves	33400-33483
artery bypass grafts	35501 - 35671
removal & revision of leg veins	37720-60
biopsy, exploration, treat lung lesion	32095-32141
removal of chest lining	32310-20
partial removal of lung	32480-32500
removal of lung	32440
4. Pacemakers and Cardiac Catheterizations	
pacemakers	33200-33232
cardiac catheterizations	93501,3,10,11 26-28,46-49
5. General Surgeon Procedures	
hysterectomies	58150-210, 58261-67
D&C	59120
gallbladder surgeries	47600,5,10, 11,20
mastectomies	19140-240
hernia repairs	39502-20 49505-590
explore abdomen	49000-10
appendectomies	44950-60
splenectomy	38100
colectomies	44140-44146
ileostomy	44310
colostomies	44320-345
breast surgeries	19005-120
repair bladder & vagina	57240,260,286
remove ovaries	58720-58945
6. Urologists' Procedures	
TUPPS	52601-52614
suprapubic prostatectomy	55821
retropubic prostatectomies	55831 55801 55810 55840 55845

Table A 4
Prevailing charge index and sub-index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consulte Index	Surgery Index	Sum of Cost Shares	Overall Index
AL	510								
		01	Northeast AL	1.02	.88	.84	.84	.8839	.88
		02	North Central AL	1.05	.82	.84	.85	.8812	.87
		03	Southeast AL	1.07	.92	.83	.84	.8999	.91
		04	Southwest AL	1.00	.89	.80	.87	.8865	.90
		05	Montgomery, AL	1.08	1.08	.92	.89	.9012	.99
		06	Rural AL	1.04	.78	.81	.87	.8001	.84
AR	520								
		13	Arkansas	.93	.79	.98	.90	.9931	.88
AS	1020								
		01	Alaska	.72	1.82	1.13	1.20	.8795	1.32
AZ	1030								
		01	Phoenix (City), AZ	.57	1.19	1.03	1.00	.9987	1.02
		02	Tucson (City), AZ	.63	1.13	.98	.92	.9987	.97
		05	Flagstaff (City), AZ	1.08	1.10	1.01	.97	.8034	1.05
		07	Prescott (City), AZ	1.08	1.05	1.05	1.00	.8203	1.04
		08	Yuma (City), AZ	.59	1.17	.95	1.01	.8747	1.02
		99	Rural Arizona	.67	1.10	1.04	1.01	.8993	1.00
CA	542								
		01	N. Coastal Cntys, CA	1.20	1.27	1.13	1.12	.9183	1.20
		02	NE Rural CA	1.10	1.26	1.11	1.18	.9183	1.20
		03	Marin/Mapa/Solan, CA	1.20	1.27	1.11	1.21	.9183	1.23
		04	Sacramento/Surr. Cntys, CA	1.18	1.25	1.08	1.13	.9183	1.19
		05	San Francisco, CA	1.20	1.28	1.10	1.28	.9958	1.25
		06	San Mateo, CA	1.21	1.28	1.15	1.25	.9175	1.25
		07	Oakland-Berkeley, CA	1.18	1.24	1.08	1.17	.9425	1.19
		08	Stockton/Surr. Cnty, CA	1.14	1.22	1.07	1.13	.9093	1.17
		09	Santa Clara, CA	1.21	1.28	1.10	1.23	.9182	1.23
		10	Merced/Surr. Cntys, CA	1.14	1.25	1.07	1.18	.9093	1.19
		11	Fresno/Madera, CA	1.05	1.23	1.07	1.18	.9093	1.13
		12	Monterey/Santa Cruz, CA	1.12	1.24	1.10	1.14	.8789	1.18
		13	Kings/Tulare, CA	1.18	1.23	1.07	1.18	.9093	1.20
		14	Bakersfield, CA	1.21	1.28	1.09	1.14	.9093	1.21
		15	San Bernardino/E. Central CA	1.20	1.32	1.23	1.24	.9093	1.27
		27	Riverside, CA	1.22	1.37	1.28	1.31	.9093	1.32
8050									
		18	Santa Barbara, CA	1.32	1.35	1.19	1.31	.9373	1.33
		17	Ventura, CA	1.38	1.38	1.31	1.28	.8873	1.33
		18	Los Angeles, CA (1st of 8)	1.19	1.43	1.32	1.42	.8948	1.39
		19	Los Angeles, CA (2nd of 8)	1.24	1.40	1.30	1.41	.8948	1.37
		20	Los Angeles, CA (3rd of 8)	1.21	1.43	1.38	1.34	.8828	1.37
		21	Los Angeles, CA (4th of 8)	1.22	1.40	1.29	1.38	.8948	1.38
		22	Los Angeles, CA (5th of 8)	1.30	1.47	1.39	1.48	.8948	1.43

Table A 4
Prevailing charge index and sub-index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
CA	2050								
		23	Los Angeles, CA (8th of 8)	1.19	1.40	1.37	1.39	.8948	1.37
		24	Los Angeles, CA (7th of 8)	1.18	1.48	1.34	1.35	.9984	1.38
		25	Los Angeles, CA (8th of 8)	1.21	1.52	1.52	1.48	.8948	1.48
		26	Anaheim-Santa Ana, CA	1.21	1.38	1.22	1.38	.9213	1.34
		28	San Diego/Imperial, CA	1.20	1.31	1.21	1.23	.9984	1.28
CO	550								
		01	Colorado	.88	.87	.78	.72	.9974	.80
CT	3070								
		01	NW and N. Central Conn.	1.13	1.17	1.03	.94	.9987	1.07
		02	SW Connecticut	1.04	1.37	1.40	1.08	.9149	1.22
		03	South Central Conn.	1.04	1.21	1.07	.99	.9987	1.09
		04	Eastern Conn.	.87	1.12	1.13	.89	.9144	1.01
DC	580								
		01	D.C. & MD/VA Suburbs	1.02	1.28	1.04	1.15	.8079	1.18
DE	570								
		01	Delaware		1.03	.86	.98	.7002	1.00
FL	590								
		01	Rural Florida	1.11	1.04	.90	1.00	.9983	1.02
		02	N/MC Florida Cities	1.11	1.11	1.02	1.02	.9987	1.07
		03	Fort Lauderdale, FL	1.27	1.23	1.23	1.14	.9976	1.20
		04	Miami, FL	1.28	1.38	1.27	1.19	.9987	1.27
GA	13110								
		01	Atlanta, GA	1.01	1.04	1.00	.92	.8702	.99
		02	Small GA Cities 02	.88	.86	.83	.93	.8715	.91
		03	Small GA Cities 03	.88	.88	.78	.92	.7919	.89
		04	Rural Georgia	.90	.82	.73	.92	.7816	.85
HI	1120								
		01	Hawaii	.67	1.18	1.18	1.11	.9897	1.09
IA	640								
		01	SE Iowa (Excl. Iowa City)	1.01	.72	.91	.77	.8520	.79
		02	Northeast Iowa	1.04	.69	.78	.77	.8681	.78
		03	North Central Iowa	.88	.71	.91	.79	.8848	.78
		04	S. Cen. IA (Excl. Des Moines)	.99	.71	.88	.78	.8449	.78
		05	Des Moines (Polk/Warren), IA	.98	.78	1.09	.81	.8595	.84
		06	Northwest Iowa	.98	.72	.84	.81	.8578	.80

Table A-4
Prevailing charge index and sub-index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
IA	640								
		07	Southwest Iowa	.93	.74	.86	.83	.8024	.81
		08	Iowa City (City Limits), IA	.52	1.13	.95	.87	.7111	.97
ID	5130								
		11	South Idaho	1.04	.89	.82	.73	.9086	.85
		12	North Idaho	.93	.93	.84	.76	.9043	.86
IL	821								
		01	Northwest, IL	.98	.78	.79	1.04	.8313	.89
		02	Rockford, IL	1.00	.91	.79	.99	.9188	.94
		03	De Kalb, IL	.93	.79	.90	.93	.8369	.86
		04	Rock Island, IL	1.00	.88	.75	.88	.8389	.89
		05	Peoria, IL	1.03	.89	.87	.98	.9188	.92
		06	Rankakee, IL	.87	.78	.90	.87	.8382	.83
		07	Quincy, IL	1.00	.82	.58	.85	.8424	.84
		08	Normal, IL	1.02	.79	.87	.93	.8358	.85
		09	Springfield, IL	1.10	.89	.73	.94	.9101	.93
		10	Champaign-Urbana, IL	.99	.89	.85	.88	.9809	.88
		11	Decatur, IL	.89	.74	.70	.82	.8978	.79
		12	East St. Louis, IL	.87	.85	.88	.94	.9321	.88
		13	Southeast IL	1.08	.85	.71	.95	.8935	.91
		14	Southern IL	1.03	.80	.74	.86	.7585	.86
		15	Suburban Chicago, IL	1.07	1.04	1.02	1.00	.8445	1.02
		16	Chicago, IL	1.28	1.10	1.06	1.13	.8445	1.14
IN	630								
		01	Metropolitan Indiana	.99	1.01	.87	.94	.9983	.97
		02	Urban Indiana	.95	.92	.72	.84	.9533	.88
		03	Rural Indiana	.86	.82	.72	.82	.9152	.82
KS	650								
		01	Rural Kansas	1.06	.91	.85	.83	1.0000	.89
KY	880								
		01	Lexington & Louisville, KY	.96	.97	.98	.86	1.0000	.92
		02	SM Cities (City Limits), KY	.85	.93	.77	.84	1.0000	.87
		03	Rural Kentucky	.85	.83	.78	.82	.9132	.89
LA	528								
		01	New Orleans, LA	1.09	.93	.92	.92	.9931	.95
		02	Shreveport, LA	1.04	.92	1.04	.86	.9931	.98
		03	Baton Rouge, LA	1.02	.92	.83	.88	.9905	.91
		04	Lake Charles, LA	1.06	.79	.78	.87	.9848	.85
		05	Monroe, LA	1.09	.83	.82	.89	.9673	.89
		06	Lafayette, LA	1.01	.85	.82	.85	.9841	.87

Table A-4
Prevailing charge index and sub-index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
LA	698								
		07	Alexandria, LA	1.00	.84	.83	.92	.9690	.89
		50	Rural Louisiana *	1.00	.75	.78	.89	.9101	.84
MA	700								
		01	Massachusetts Urban	1.19	1.08	.81	.97	.9722	1.02
		02	Mass. Suburbs/Rural (Cities)	1.26	.88	.69	.99	.8892	.95
MD	690								
		01	Baltimore/Surr. Cnty., MD	1.17	1.20	1.08	1.00	.9945	1.11
		02	Western Maryland	1.05	1.03	.88	.98	.9169	1.01
		03	South & E. Shore MD	1.08	1.08	.88	.98	.9945	1.01
ME	81200								
		01	Northern Maine	.89	.87	.75	.88	.8337	.86
		02	Central Maine	.92	.90	.87	.89	.7583	.88
		03	Southern Maine	.92	1.01	.88	.90	.8413	.94
MI	710								
		01	Detroit, MI	.88	1.09	.97	.89	1.0000	.97
		02	Michigan, Not Detroit	.88	.92	.88	.87	1.0000	.89
MN	720								
		02	Northern Minnesota	.97	.81	.94	.85	.9003	.88
		04	Southern Minnesota	.95	.78	.96	.83	.8980	.83
	10240								
		01	St. Paul-Minneapolis, MN *	.90	.89	.88	.84	.9987	.87
MO	740								
		01	St. Joseph, MO	1.03	.78	.81	.91	.9047	.85
		02	W. K. C. (Clay/Platte), MO	1.12	.84	.85	.94	.9123	.92
		03	K.C. (Jackson County), MO	1.19	1.00	.91	.95	.9974	1.00
		04	Suburban Kansas City, KA	1.03	.89	.83	.95	.9941	.93
		05	Kansas City, KA	.77	.88	.88	.89	.9974	.87
		08	Rural NW Counties, MO	1.00	.71	.88	.91	.9175	.83
	11280								
		01	St. Louis/Lg E. Cities, MO	1.05	.98	.94	.78	1.0000	.90
		02	SM. E. Cities & Jeff. Cnty., M	.82	.85	.80	.74	1.0000	.80
		03	Rural (Excl. Rural NW) MO	.86	.71	.74	.77	.9169	.76

Table A-4
Prevailing charge index and sub-index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
MS	10250	01	Rural Mississippi	.94	.86	.70	.81	.9041	.75
		02	Urban MS (City Limits)	.91	.74	.71	.78	.9371	.78
MT	751	01	MONTANA	1.05	.97	.79	.81	.9981	.91
NC	13340	94	Urban (City Limits) NC	.95	1.05	.94	.96	.9326	1.00
		95	Rural North Carolina	.86	.82	.80	.91	.8879	.85
ND	820	01	North Dakota "	1.00	.97	.92	.82	.9175	.92
NE	645	01	Omaha & Lincoln, NE	1.12	.88	.79	.75	.9498	.86
		03	Urban (Cnty Pop 25000) NE	.98	.88	.77	.74	.7222	.74
		04	Rural Nebraska	.88	.74	.70	.70	.8768	.74
NH	780	40	New Hampshire	.91	.86	.72	.86	.9818	.88
NJ	13310	01	Northern New Jersey	1.18	1.18	1.13	1.14	1.0000	1.16
		02	Middle New Jersey	1.14	1.05	.97	1.11	1.0000	1.08
		03	Southern New Jersey	1.17	.97	.95	1.06	.9987	1.03
NM	5320	01	New Mexico "	.45	1.03	1.02	.98	.9848	.92
NV	1290	01	Las Vegas, et al (Cities), NV	.84	1.37	1.10	1.19	.9253	1.22
		03	Elko & Ely (Cities), NV	.83	1.27	1.05	1.29	.8887	1.19
		99	Rural Nevada	.69	1.21	1.15	1.39	.8834	1.14
NY	801	01	Buffalo/Surr. Cnty., NY	.93	1.04	.88	.87	1.0000	.95
		02	Rochester/Surr. Cnty., NY	1.26	1.07	.89	.88	.9897	1.00
		03	N. Central Cities, NY	1.18	1.07	.81	.93	.9903	1.01
		04	Rural New York	1.07	.99	.78	.88	1.0000	.94

Table A-4
Prevailing charge index and sub-index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
NY	803								
		01	Manhattan, NY	1.52	1.87	1.24	1.69	.9786	1.64
		02	NYC Suburbs/Long I., NY	1.53	1.25	1.14	1.37	.9799	1.33
		03	Poughkeepsie/W. NYC Suburbs	1.23	.99	1.03	1.21	.9189	1.11
		14330							
OH	18360	04	Queens, NY	1.53	1.25	1.14	1.37	.9799	1.33
		01	Akron, OH	1.16	1.08	.96	.97	.9591	1.03
		02	Cincinnati, OH	1.07	1.03	1.04	.93	.9577	.99
		03	Cleveland, OH	1.10	1.14	1.15	1.08	.9648	1.11
		04	Columbus, OH	1.02	1.08	.96	1.05	.9808	1.05
		05	Dayton, OH	.96	1.03	.90	1.00	.9812	1.00
		06	Northwest (Lima), OH	1.08	.93	.99	.99	.9587	.98
		07	Mansfield, OH	.81	.98	.95	.88	.8732	.92
		08	Springfield, OH	.93	1.02	1.03	.90	.8882	.97
		09	E. Central (Steubenville), OH	.89	.98	.87	.95	.8818	.95
		10	Toledo (Lucas/Wood), OH	1.09	1.01	1.04	1.04	.9626	1.04
		11	Youngstown, OH	1.12	1.03	.99	1.08	.9843	1.06
		12	W. Central (Lake Plains), OH	.92	.92	1.00	.86	.9024	.90
		13	Marion & Surr. Cnty., OH	.88	.97	.93	1.00	.9109	.97
		14	Scioto Valley, OH	1.12	.95	.92	.94	.9043	.97
		15	Southeast (Ohio Valley), OH	1.04	.92	.95	1.00	.8981	.97
OK	1370	01	OK city, et al (Cities), OK	.51	.97	.75	.88	.9890	.86
		02	Tulsa, et al (Cities), OK	.56	.99	.87	.92	.9890	.90
		03	Sm. Cities (Southern), OK	.49	.85	.73	.78	.9080	.77
		04	Sm. Cities (Northern), OK	.49	.91	.74	.80	.9037	.80
		99	Rural Oklahoma	.64	.75	.68	.84	.8952	.76
OR	1380	01	Portland, et al (Cities), OR	.58	.98	.87	.85	.9865	.87
		02	Eugene, et al (Cities), OR	.64	1.00	.83	.85	.9124	.88
		03	Salem, et al (Cities), OR	.88	.97	.81	.79	.9048	.86
		12	SW OR Cities (City Limits)	.59	.95	.86	.81	.9297	.85
		99	Rural Oregon	.53	.97	.80	.84	.8921	.86
PA	865	01	Pilly/Pitt Med Schs/Hospes	1.36	1.33	.97	1.08	.9836	1.21
		02	LD Pennsylvania Cities	1.40	1.17	.93	1.02	.9838	1.13
		03	Small Pennsylvania Cities	1.84	1.03	.85	.97	.9636	1.02
		04	Rural Pennsylvania	1.38	1.01	.79	.92	.8850	1.01

Table A 4
Prevailing charge index and sub index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
RI	870	01	Rhode Island *	.89	1.05	.88	.93	.9987	.97
SC	880	01	South Carolina	.98	.73	.73	.82	.9931	.80
SD	820	02	South Dakota	.82	.81	.58	.78	.8909	.78
TN	5440	35	Tennessee	.94	.85	.88	.80	.9971	.84
TX	900	02	Northeast Rural Texas	1.05	.81	.87	.98	.9949	.90
		03	Southeast Rural Texas	1.12	.88	.81	1.02	.9490	.98
		04	Western Rural Texas	.96	.81	.79	.97	.9830	.89
		06	Temple, TX	.91	.71	.80	.85	.5399	.75
		07	San Antonio, TX	.98	1.00	.88	1.02	.9203	1.00
		08	Texarkana, TX	.75	.74	.81	.72	.5726	.75
		09	Brasoria, TX	1.00	.70			.5087	.78
		10	Brownsville, TX	.78	.75	.73	.90	.6284	.77
		11	Dallas, TX	1.10	1.08	.91	1.04	.9733	1.05
		12	Denton, TX	1.04	.83	.84		.5778	.88
		13	Odessa, TX	.83	.87			.5028	.71
		14	El Paso, TX	.82	.82	.84	1.14	.7327	.88
		15	Galveston, TX	1.28	1.05	.94	1.10	.8542	1.09
		16	Grayson, TX	.85	.75	.53	.71	.5857	.75
		17	Longview, TX	.96	.71	.74	.84	.5788	.77
		18	Houston, TX	1.13	.99	1.00	1.08	.9793	1.04
		19	McAllen, TX	1.14	.71	.80	.99	.6287	.81
		20	Beaumont, TX	1.18	.88	.80	.91	.7691	.92
		21	Lubbock, TX	.99	.90	.77	.95	.8753	.91
		22	Waco, TX	.85	.77	.75	1.21	.5780	.80
		23	Midland, TX	1.01	.77			.4812	.83
		24	Corpus Christi, TX	1.11	.98	.83	1.00	.7302	.99
		25	Orange, TX	1.05	.77			.5098	.84
		26	Amarillo, TX	1.17	.84	.88	.77	.6176	.91
		27	Tyler, TX	1.04	.95	.80	.86	.6187	.95
		28	Fort Worth, TX	.99	.87	.83	.97	.8734	.92
		29	Abilene, TX	.92	.72	.72		.5592	.77
		30	San Angelo, TX	.87	.95	.98	1.01	.5399	.94
		31	Austin, TX	1.09	.98	.90	.95	.7292	.99
		33	Laredo, TX	1.02	.88			.4197	.72
		34	Wichita Falls, TX	.88	.80	.82	1.73	.5884	.83
UT	910	01	Utah	.93	.86	.82	.78	.9758	.83

Table A-4
Prevailing charge index and sub-index values, by state and locality

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
VA	10490								
		01	Richmond # Charlottesville, VA	.95	.98	.82	.86	.8970	.91
		02	Tidewater # W. VA Counties	.94	.89	.89	.92	.8970	.91
		03	Sm Town/Industrial VA	.94	.74	.75	.81	.8970	.79
		04	Rural Virginia	.92	.70	.86	.71	.8153	.74
VT	780								
		50	Vermont		.84	.75	.88	.5805	.85
WA	930								
		01	W # SE WA (Excl Seattle)	1.08	1.02	.93	.94	.9649	.99
		03	Spokane # Richlnd (Clties), WA	1.08	1.05	.82	.76	.8858	.94
		04	E Cen # WE WA (Excl Spokane)	.99	.98	.84	.58	.5917	.97
WI	951								
		04	Milwaukee, WI	1.02	1.04	.94	.95	.9722	1.00
		12	Northwest Wisconsin	.92	.83	.77	.80	.8344	.84
		13	Central Wisconsin	.94	.78	.89	1.15	.8058	.83
		14	Southwest Wisconsin	.85	.79	.88	.83	.8115	.81
		15	Madison, WI (Dane County)	1.01	.97	.88	.85	.9085	.93
		19	La Crosse, WI (W-Central) *	.90	.90	.85	.95	.8615	.91
		38	Wausau, WI (W-Central)	1.01	.97	.83	.90	.8490	.94
		40	Green Bay, WI (Northeast)	.94	.86	.88	.93	.8911	.90
		48	Milwaukee Suburbs, WI (SE)	1.03	1.00	.88	.98	.8838	.99
		54	Janesville, WI (S-Central)	.97	.91	.79	.97	.8120	.93
		80	Oshkosh, WI (E-Central)	.91	.95	.85	.89	.8688	.92
WV	16510								
		18	Charleston, WV	.94	1.07	.98	1.00	.9885	1.02
		17	Wheeling, WV	.94	1.05	.99	.93	.9721	.99
		16	Eastern Valley, WV	.88	.95	.99	1.09	.9139	.99
		19	Ohio River Valley, WV	1.03	.97	.99	.89	.9030	.95
		20	Southern Valley, WV	.90	1.05	.89	.95	.8975	.98
WY	8530								
		02	Wyoming	.87	.92	1.08	.75	.8910	.86

Table A-5
Prevailing charge index and sub-index values,
by state and locality, ranked in descending order of overall index

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
NY	803	01	Manhattan, NY	1.52	1.87	1.24	1.69	.9786	1.44
CA	8050	25	Los Angeles, CA (8th of 8)	1.21	1.52	1.32	1.48	.8948	1.48
CA	8080	28	Los Angeles, CA (8th of 8)	1.30	1.47	1.39	1.45	.8948	1.43
CA	8050	18	Los Angeles, CA (1st of 8)	1.19	1.43	1.32	1.42	.8948	1.39
CA	8050	24	Los Angeles, CA (7th of 8)	1.18	1.48	1.34	1.35	.8944	1.38
CA	8080	19	Los Angeles, CA (2nd of 8)	1.24	1.40	1.30	1.41	.8948	1.37
CA	8050	20	Los Angeles, CA (3rd of 8)	1.21	1.43	1.38	1.34	.8828	1.37
CA	8050	23	Los Angeles, CA (6th of 8)	1.19	1.40	1.37	1.39	.8948	1.37
CA	8050	21	Los Angeles, CA (4th of 8)	1.22	1.40	1.29	1.38	.8948	1.35
CA	8050	26	Anaheim-Santa Ana, CA	1.21	1.38	1.22	1.36	.9213	1.34
NY	803	08	NYC Suburbs/Long I., NY	1.53	1.25	1.14	1.37	.9799	1.33
NY	14330	04	Queens, NY	1.53	1.25	1.14	1.37	.9799	1.33
CA	8050	17	Ventura, CA	1.36	1.38	1.31	1.28	.8873	1.33
CA	8050	16	Santa Barbara, CA	1.38	1.35	1.19	1.31	.9373	1.33
CA	542	27	Riverside, CA	1.22	1.37	1.26	1.31	.9093	1.32
AK	1080	01	Alaska	.72	1.62	1.13	1.20	.8795	1.32
FL	590	04	Miami, FL	1.26	1.36	1.27	1.19	.9987	1.27
CA	542	15	San Bernardino/E. Central CA	1.20	1.38	1.23	1.24	.9093	1.27
CA	8050	28	San Diego/Imperial, CA	1.20	1.31	1.21	1.23	.9984	1.26
CA	542	06	San Mateo, CA	1.21	1.28	1.15	1.25	.9175	1.25
CA	542	05	San Francisco, CA	1.20	1.26	1.10	1.28	.9958	1.25
CA	542	03	Marin/Mapa/Solan, CA	1.20	1.27	1.11	1.21	.9183	1.23
CA	542	09	Santa Clara, CA	1.21	1.25	1.10	1.23	.9183	1.23
CT	3070	02	EW Connecticut	1.04	1.37	1.06	1.36	.9149	1.22
NV	1290	01	Lake Vegas, et al (Cities), NV	.84	1.37	1.10	1.19	.9253	1.22
CA	542	14	Bakersfield, CA	1.21	1.28	1.09	1.14	.9093	1.21
PA	805	01	Pitt/Pitt Med Echo/Hospe	1.36	1.33	.97	1.08	.9636	1.21
CA	542	01	N. Coastal Cntys, CA	1.20	1.27	1.13	1.12	.9183	1.20
CA	542	13	Kings/Tulare, CA	1.18	1.23	1.07	1.18	.9093	1.20
CA	542	02	NZ Rural CA	1.10	1.28	1.11	1.18	.9183	1.20
FL	590	03	Fort Lauderdale, FL	1.27	1.23	1.23	1.14	.9976	1.20
CA	542	07	Oakland-Berkeley, CA	1.16	1.24	1.08	1.17	.9425	1.19
CA	542	10	Merced/Surr. Cntys, CA	1.14	1.23	1.07	1.18	.9093	1.19
NV	1290	03	Elko # Ely (Cities), NV	.83	1.27	1.05	1.29	.9687	1.19
CA	542	04	Sacramento/Surr. Cnty, CA	1.16	1.25	1.08	1.13	.9183	1.19
DC	590	01	D.C. # MD/VA Suburbs	1.02	1.28	1.04	1.15	.8079	1.18
CA	542	19	Monterey/Santa Cruz, CA	1.18	1.24	1.10	1.14	.8789	1.18
CA	542	06	Stockton/Surr. Cntys, CA	1.14	1.22	1.07	1.13	.9093	1.17
NJ	13310	01	Northern New Jersey	1.18	1.18	1.13	1.14	1.0000	1.16
NV	1290	09	Rural Nevada	.69	1.21	1.15	1.39	.8834	1.14
IL	621	16	Chicago, IL	1.28	1.10	1.06	1.13	.8448	1.14
CA	842	11	Fresno/Madera, CA	1.05	1.20	1.08	1.08	.9093	1.13
PA	883	02	LO Pennsylvania Cities	1.40	1.17	.93	1.02	.9636	1.13
OH	16390	03	Cleveland, OH	1.10	1.14	1.15	1.08	.9548	1.11
MD	690	01	Baltimore/Surr. Cnty, MD	1.17	1.20	1.08	1.00	.9945	1.11
NY	803	03	Poughkeepsie/W. NYC Suburbs	1.23	.99	1.03	1.21	.9189	1.11
CT	3070	03	South Central Conn.	1.04	1.21	1.07	.99	.9987	1.09
TX	900	15	Galveston, TX	1.26	1.05	.94	1.10	.8542	1.09
HI	1120	01	Hawaii	.67	1.18	1.18	1.11	.9887	1.09
NJ	13310	02	Middle New Jersey	1.14	1.05	.97	1.11	1.0000	1.08
FL	590	02	N/NC Florida Cities	1.11	1.11	1.08	1.02	.9987	1.07
CT	3070	01	NW and N. Central Conn.	1.13	1.17	1.03	.94	.9987	1.07

Table A-5
Prevailing charge index and sub-index values,
by state and locality, ranked in descending order of overall index

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
OH	18380	11	Youngstown, OH	1.12	1.03	.99	1.08	.9845	1.08
TX	900	11	Dallas, TX	1.10	1.08	.91	1.04	.9733	1.05
AZ	1030	05	Flagstaff (City), AZ	1.08	1.10	1.01	.97	.8034	1.05
OH	18380	04	Columbus, OH	1.02	1.08	.98	1.05	.9808	1.05
TX	900	18	Houston, TX	1.13	.99	1.00	1.08	.9793	1.04
AZ	1030	07	Flagstaff (City), AZ	1.08	1.05	1.00	1.08	.8203	1.04
OH	18380	10	Toledo (Lucas/Wood), OH	1.09	1.01	1.04	1.04	.9828	1.04
OH	18380	01	Akron, OH	1.18	1.08	.98	.97	.9591	1.03
NJ	13310	03	Southern New Jersey	1.17	.97	.95	1.06	.9887	1.03
AZ	1030	01	Phoenix (City), AZ	.97	1.19	1.03	1.00	.9967	1.02
MA	700	01	Massachusetts Urban	1.19	1.08	.81	.97	.9722	1.02
IL	681	16	Suburban Chicago, IL	1.07	1.04	1.02	1.00	.8445	1.02
FL	590	01	Rural Florida	1.11	1.04	.90	1.00	.9963	1.02
PA	885	03	Small Pennsylvania Cities	1.84	1.03	.85	.97	.9836	1.02
AZ	1030	08	Yuma (City), AZ	.99	1.17	1.01	.8747	1.02	1.02
WV	18510	16	Charleston, WV	.94	1.07	.99	1.00	.9865	1.02
PA	885	04	Rural Pennsylvania	1.35	1.01	.79	.92	.8850	1.01
MD	690	03	South & E Shore MD	1.08	1.06	.85	.96	.9945	1.01
NY	801	03	N. Central Cities, NY	1.15	1.07	.61	.93	.9993	1.01
CT	3070	04	Eastern Conn.	.87	1.12	1.13	.69	.9144	1.01
MD	890	02	Western Maryland	1.08	1.03	.86	.98	.9189	1.01
AZ	1030	99	Rural Arizona	.87	1.10	1.04	1.01	.8993	1.00
NY	801	02	Rochester/Surr. Cnty., NY	1.88	1.07	.89	.86	.9697	1.00
OH	18380	05	Dayton, OH	.98	1.03	.90	1.00	.9812	1.00
NC	13340	04	Urban (City Limits) NC	.95	1.05	.94	.98	.9328	1.00
MO	740	03	K. C. (Jackson County), MO	1.19	1.00	.91	.95	.9974	1.00
WI	951	04	Milwaukee, WI	1.02	1.04	.94	.95	.9782	1.00
DE	570	01	Delaware	.92	1.03	.86	.96	.7002	1.00
TX	900	07	San Antonio, TX	.98	1.00	.88	1.02	.9203	1.00
AL	510	05	Montgomery, AL	1.06	1.06	.92	.89	.9012	.99
OH	18380	02	Cincinnati, OH	1.07	1.03	1.04	.93	.9577	.99
GA	13110	01	Atlanta, GA	1.01	1.04	1.00	.92	.8702	.99
TX	900	24	Corpus Christi, TX	1.11	.96	.83	1.00	.7302	.99
WV	18510	18	Eastern Valley, WV	.88	.95	.99	1.09	.9139	.99
WI	951	46	Milwaukee Suburban, WI (SE)	1.03	1.00	.88	.98	.8839	.99
WA	930	01	W & SE WA (Excl. Seattle)	1.08	1.02	.93	.94	.9849	.99
WV	18510	17	Whellington, WV	.94	1.05	.99	.93	.9721	.99
TX	900	31	Austin, TX	1.09	.98	.90	.95	.7292	.99
WV	18510	20	Southern Valley, WV	.90	1.05	.89	.95	.6975	.98
OH	18380	06	Northwest (Lima), OH	1.08	.93	.99	.99	.9587	.98
AZ	1030	02	Tucson (City), AZ	.83	1.13	.98	.92	.9967	.97
MI	710	01	Detroit, MI	.88	1.09	.97	.89	1.0000	.97
RI	870	01	Rhode Island	.89	1.05	.84	.93	.9657	.97
IN	830	01	Metropolitan Indiana	.99	1.01	.87	.94	.9983	.97
OH	18380	08	Springfield, OH	.93	1.02	1.03	.90	.8882	.97
OH	18380	14	Scioto Valley, OH	1.12	.95	.92	.94	.9043	.97
WA	930	04	E. Cen & NE WA (Excl. Spokane)	.99	.98	.84	.58	.5917	.97
OH	18380	13	Marion & Surr. Cntys., OH	.88	.97	.93	1.00	.9109	.97
IA	840	08	Iowa City (City Limits), IA	.82	1.13	.95	.87	.7111	.97
OH	18380	15	Southeast (Ohio Valley), OH	1.04	.92	.95	1.00	.8981	.97
TX	900	03	Southeast Rural Texas	1.12	.88	.81	1.02	.9490	.98
OH	18380	09	E. Central (Staubenvl), OH	.89	.98	.87	.95	.8818	.95

Table A-5
Prevailing charge index and sub-index values,
by state and locality, ranked in descending order of overall index

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
TX	900	27	Tyler, TX	1.04	.95	.80	.88	.8187	.95
MA	700	02	Mass. Suburbs/Rural (Cities)	1.28	.86	.89	.99	.8892	.95
WV	18810	19	Ohio River Valley, WV	1.03	.97	.99	.89	.9030	.95
NY	801	01	Buffalo/Suff. Cnty., NY	.93	1.04	.88	.87	1.0000	.95
LA	528	01	New Orleans, LA	1.09	.93	.92	.92	.9931	.95
WI	951	38	Wausau, WI (N-Central)	1.01	.97	.83	.90	.8490	.94
TX	900	30	San Angelo, TX	.87	.95	.98	1.01	.5399	.94
IL	881	02	Rockford, IL	1.00	.91	.79	.99	.9188	.94
ME	21200	03	Southern Maine	.92	1.01	.88	.90	.8413	.94
NY	801	04	Rural New York	1.07	.99	.78	.88	1.0000	.94
WA	930	03	Spokane & Richland (Cities), WA	1.05	.97	.91	.79	.8658	.94
WI	951	54	Janesville, WI (S-Central)	.97	.89	.83	.95	.9941	.93
MO	740	04	Suburban Kansas City, KA	1.03	.89	.73	.94	.9181	.93
IL	881	09	Springfield, IL	1.10	.89	.73	.94	.9085	.93
WI	951	15	Madison, WI (Dane County)	1.01	.97	.88	.85	1.0000	.92
NY	880	01	Lexington & Louisville, KY	.98	.97	.98	.88	.9848	.92
WV	5320	01	New Mexico *	.45	1.03	1.02	.98	.9931	.92
LA	528	02	Shreveport, LA	1.04	.92	1.04	.88	.9188	.92
TX	900	20	Beaumont, TX	1.18	.88	.80	.91	.8734	.92
IL	621	05	Peoria, IL	1.03	.89	.87	.96	.8888	.92
TX	900	28	Fort Worth, TX (E-Central)	.91	.95	.85	.89	.8732	.92
WI	951	80	Oshkosh, WI (E-Central)	.81	.98	.95	.88	.9175	.92
OH	16380	07	Hansfield, OH	1.00	.97	.92	.82	.9123	.92
ND	820	01	North Dakota *	1.12	.84	.85	.94	.8970	.91
MO	740	02	M. K. C. (Clay/Platte), MO	.95	.96	.82	.88	.8815	.91
VA	10490	01	Richmond & Charlottesville, VA	.90	.90	.85	.95	.8753	.91
WI	951	19	La Crosse, WI (W-Central) *	.99	.90	.77	.95	.8999	.91
TX	900	21	Lubbock, TX	1.07	.92	.83	.84	.9905	.91
AL	510	03	Southeast AL *	1.02	.92	.83	.88	.8178	.91
LA	528	03	Baton Rouge, LA	1.17	.84	.88	.77	.8935	.91
TX	900	28	Amarillo, TX	1.08	.85	.71	.95	.8715	.91
IL	821	13	Southeast IL	.85	.98	.83	.93	.8970	.91
GA	13110	02	Small GA Cities 02	.94	.89	.89	.92	.9981	.90
VA	10490	02	Tidewater & N. VA Counties	1.05	.97	.79	.81	.9024	.90
MT	751	01	Montana	.92	.92	1.00	.88	.9949	.90
OH	18380	12	W. Central (Lake Plains), OH	.81	.87	.96	.92	.8980	.90
TX	900	02	Northeast Rural Texas	.58	.99	.87	.92	.8911	.90
OK	1370	02	Tulsa, et al (Cities), OK	1.05	.98	.94	.78	.8985	.90
MO	11280	01	St. Louis/Lg E. Cities, MO	.94	.88	.86	.95	.8911	.90
WI	951	40	Green Bay, WI (Northeast)	1.00	.89	.80	.87	.8930	.89
AL	510	04	Southeast AL	1.08	.81	.79	.97	.8890	.89
TX	900	04	Western Rural Texas	1.08	.91	.85	.83	.8719	.89
KS	850	01	Rural Kansas	1.00	.84	.83	.92	.8313	.89
HI	528	07	Alexandria, LA	.88	.92	.88	.87	.7327	.88
NI	710	02	Nichigan, Not Detroit	1.00	.88	.75	.88	.8389	.89
IL	881	04	Rock Island, IL	.88	.88	.78	.92	.8973	.89
GA	13110	03	Small GA Cities 03	1.09	.83	.78	.89	.8313	.89
LA	528	05	Monroe, LA	.98	.78	.79	1.04	.7327	.88
IL	681	01	Northwest, IL	.82	.82	.82	.84	.83	.88
TX	900	14	El Paso, TX	.92	1.00	.83	.83	.9124	.88
OR	1380	02	Eugene, et al (Cities), OR	.92	.90	.67	.89	.7583	.88
ME	21200	02	Central Maine						

Table A-5
Prevailing charge index and sub-index values.
by state and locality, ranked in descending order of overall index

State	Carrier	Locality	Location	Radiology Index	Medical Index	Consults Index	Surgery Index	Sum of Cost Shares	Overall Index
				.49	.91	.74	.80	.9037	.80
OK	1370	04	Sm. Cities (Northern), OK	.82	.85	.80	.74	1.0000	.80
MO	11280	02	SM. E. Cities & Jeff. Cnty.. M	.98	.73	.73	.82	.9931	.80
SC	880	01	South Carolina	.98	.72	.84	.81	.8578	.80
IA	840	08	Northwest Iowa	.94	.74	.75	.81	.8970	.79
VA	10490	03	Sm. Town/Industrial VA	1.01	.72	.91	.77	.8520	.79
IA	640	01	SE Iowa (Excl. Iowa City)	.89	.74	.70	.82	.8978	.78
IL	820	11	Decatur, IL	.82	.81	.58	.78	.8449	.78
SD	840	02	South Dakota	.99	.71	.88	.76	.8648	.78
IA	840	04	S. Cen. IA (Excl. Des Moines)	.88	.71	.91	.79	.8881	.78
IA	840	03	North Central Iowa	1.04	.69	.78	.77	.5087	.78
IA	840	02	Northeast Iowa	1.00	.70				.78
TX	900	09	Brasoria, TX	.91	.74	.71	.78	.9371	.77
NE	10450	02	Urban NE (City Limits)	.96	.85	.73	.78	.9060	.77
TX	900	17	Longview, TX	.49	.72	.72		.5592	.77
OK	1370	03	Sm. Cities (Southern), OK	.82	.72	.73	.90	.6284	.76
TX	900	29	Ablene, TX	.78	.75	.78	.84	.8952	.76
TX	900	10	Brownsville, TX	.84	.75	.68	.84	.9169	.76
TX	900	09	Rural Oklahoma	.78	.71	.74	.77	.5857	.75
OK	1370	03	Rural (Excl. Rural NW) MO	.88	.71	.53	.71	.5857	.75
MO	11280	03	Rural (Excl. Rural NW) MO	.85	.75	.53	.71	.9041	.75
TX	900	16	Grayson, TX	.94	.66	.70	.81	.5399	.75
TX	10250	01	Rural Mississippi	.91	.71	.80	.72	.5726	.75
TX	900	06	Temple, TX	.75	.74	.81	.70	.8768	.74
TX	900	08	Texarkana, TX	.88	.74	.77	.74	.7822	.74
NE	645	04	Rural Nebraska	.98	.68	.66	.71	.8153	.74
NE	645	03	Urban (Cnty. Pop. >25000) NE	.98	.70	.66	.71	.4197	.73
VA	10490	04	Rural Virginia	1.08	.68				.71
TX	900	33	Laredo, TX	.83	.87			.5088	
TX	900	13	Odessa, TX						



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